6.

Eastern Pacific Expeditions of the New York Zoological Society. XXXI.

Uca schmitti, a New Species of Brachyuran Crab from the West Coast of Central America.[1]

JOCELYN CRANE

Research Zoologist, Department of Tropical Research, New York Zoological Society.

(Plate I; Text-figure 1).

[This is the thirty-first of a series of papers dealing with the collections of the Eastern Pacific Expeditions of the New York Zoological Society made under the direction of Dr. William Beebe. The present paper is concerned with specimens taken on the Eastern Pacific *Zaca* Expedition, and, through the kindness of Dr. Waldo L. Schmitt and Dr. Thomas Barbour, with material in the collections of the United States National Museum in Washington and of the Museum of Comparative Zoology at Harvard in Cambridge, Massachusetts.]

Except for nine specimens from the eastern Pacific coast, referred to *Uca mordax* by Dr. Rathbun (1917) and myself (1941), the known range of the species is restricted to the western Atlantic. A reëxamination of each of these nine examples and their comparison with many Atlantic specimens of *mordax* have convinced me that they should be referred to a new, homologous species, described below. With the taxonomic separation of these forms, no species of *Uca* remains which, in the consideration of modern taxonomists, occurs on both the Atlantic and Pacific coasts of the hemisphere.

Uca schmitti sp. nov.[2]

Text-fig. 1; Pl. I.

References: Uca mordax Rathbun, 1917, p. 393 (part.). Crane, 1941, p. 176; text-figs. 2, 3, 4E, 5.

Description: This proposed new species, although completely distinct from its Atlantic homologue, *U. mordax,* differs from it noticeably and invariably only in the following characters:

1. The oblique ridge inside the palm is much lower than in *mordax,* and the tubercles with which it is irregularly covered are smaller. Similarly, the tubercles between this ridge and the one at the base of the dactyl are fewer, cover a smaller area and are themselves smaller. These characters alone enable one to separate a mixed group of moderate-sized specimens without the aid of a lens.

2. The palm is relatively deeper than in *mordax,* and the fingers shorter.

3. In contrast to *mordax,* on each of the first three ambulatories there is little pile on the upper sides of the merus and carpus, and none on the lower sides of the manus.

4. Hair on tips of minor chelae usually almost lacking in adults, and always far sparser than in *mordax.*

5. Marginal line of front almost straight, not convex; front appearing slightly broader and shallower than in *mordax,* although this character is variable and cannot be definitely measured.

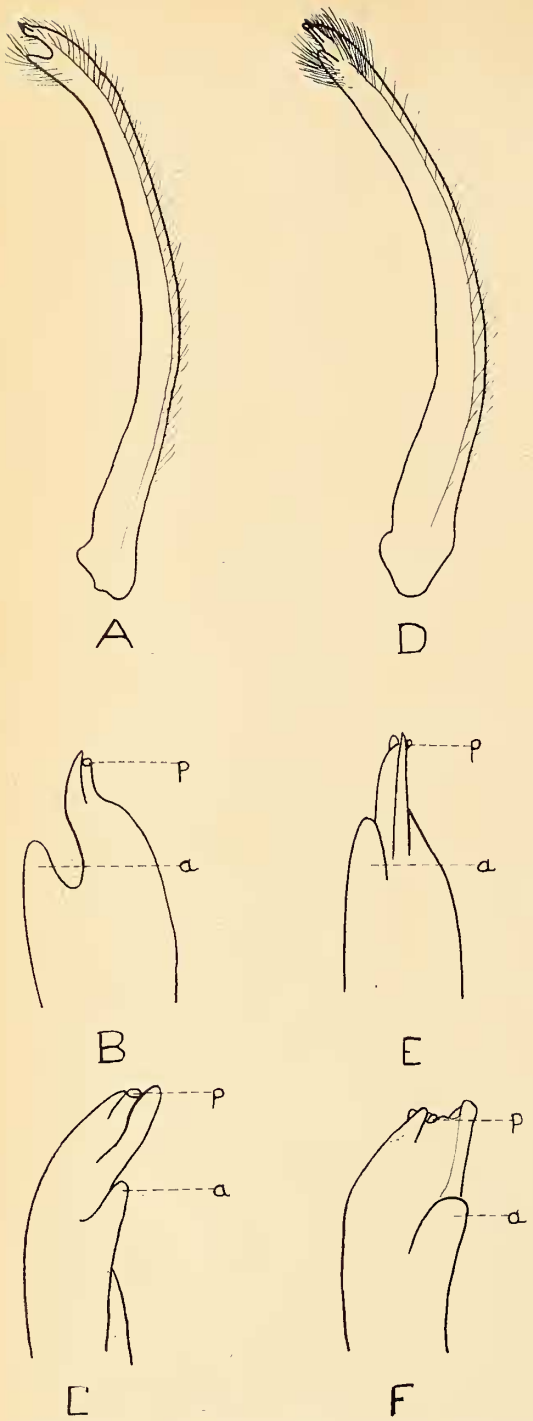
6. Abdominal appendage thicker, with subterminal arm closely applied to tip of appendage, instead of projecting from it, as it does in *mordax.*

7. All four males observed alive were definitely spotted (Crane, 1941, p. 177); none of the many examples of *U. mordax* which I observed in Venezuela ever showed a trace of spots (see paper immediately following, *Zoologica,* Vol. XXVIII, p. 37).

Measurements: Male holotype (U.S. National Museum No. 80451), length 13.4 mm., breadth 20 mm.; base of manus to tip of pollex 35 mm. Three male paratypes (U.S. N.M. No. 22306), lengths 13, 14 and 14.5 mm. Four male paratypes (Dept. Tropical Research, N.Y. Zoological Soc. Nos. 381,116, 381,117, 381,118), lengths 9.7, 13, 14 and 14.5 mm. One male (Museum Comparative Zoology No. 5892), length 15.3 mm.

[1] Contribution No. 652, Department of Tropical Research, New York Zoological Society.

[2] Published by permission of the Secretary of the Smithsonian Institution.



Text-fig. 1. Right abdominal appendage of adult male in *Uca mordax* and *U. schmitti*. **A**, *mordax*, outer lateral view; **B**, same, tip, outer lateral view; **C**, same, tip, anterior view; **D**, *schmitti*, outer lateral view; **E**, same, tip, outer lateral view; **F**, same, tip, anterior view. **p**: genital opening; **a**: subterminal arm. (Exact numbers of hairs not shown in full-length views, although apparent proportions and exact locations are indicated; hairs omitted from drawings of tips).

Range: Acapulco, Mexico, to Golfito, Costa Rica.

Material: Holotype: U.S.N.M. No. 80451, San Blas, Tepic Territory, Mex.; 3 paratypes: U.S.N.M. No. 22306, same locality; 4 paratypes: Dept. Tropical Research, N. Y. Zool. Soc.: No. 381,116, San Juan del Sur, Nicaragua; No. 381,117, Negritos Island, Costa Rica; No. 381,118, Golfito, Costa Rica; 1 male: Museum Comparative Zoology, No. 5892, Acapulco, Mexico.

This species is named in honor of Dr. Waldo L. Schmitt, Curator of the Division of Marine Invertebrates at the United States National Museum.

Bibliography.

Crane, J.
1941. Eastern Pacific Expeditions of the New York Zoological Society. XXVI. Crabs of the Genus *Uca* from the West Coast of Central America. *Zoologica*, Vol. 26, No. 19, pp. 145-208.

Rathbun, M. J.
1917. The Grapsoid Crabs of America. *Spec. Bull. U. S. Nat. Mus.* No. 97, pp. xxii & xxxx, 1-461.

EXPLANATION OF THE PLATE.

Plate I.

Fig. 1. *Uca schmitti*. Male holotype (U.S.N.M. No. 80451), dorsal view. Carapace length 13.4 mm.

Fig. 2. *Uca schmitti*. Major chela of paratype (U.S.N.M. No. 22306), inner view. Carapace length 14 mm. × 2.4.

Fig. 3. *Uca mordax*. Major chela of specimen from Caripito, Venezuela (Dept. Trop. Research, N.Y.Z.S. No. 4252a), inner view. Carapace length 14 mm. × 2.4.

Fig. 4. *Uca mordax*. Major chela from Caripito, Venezuela (Dept. Trop. Research, N.Y.Z.S. No. 4252b), inner view, × 2.4.